

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

March 23, 2007

Board of Land and
Natural Resources
Honolulu, Hawaii

REQUEST FOR AUTHORIZATION/APPROVAL TO ISSUE
ONE (1) NORTHWESTERN HAWAIIAN ISLANDS (NWHI) RESEARCH PERMIT TO DR.
JASON BAKER, OF NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
(NOAA), NATIONAL MARINE FISHERIES SERVICE (NMFS), VALID FROM APRIL 1,
2007 TO SEPTEMBER 30, 2007, TO ACCESS THE WATERS SURROUNDING
MOKUMANAMANA ISLAND, NIHOA ISLAND, FRENCH FRIGATE SHOALS, LAYSAN
ISLAND, LISIANSKI ISLAND, AND PEARL AND HERMES ATOLL IN ORDER TO
MONITOR THE SIX MAJOR SUBPOPULATIONS OF HAWAIIAN MONK SEAL.

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a NWHI Research Permit to Applicant Dr. Jason Baker of NMFS, NOAA, pursuant to the *Hawaii Administrative Rules*, §13-60.5, the *Hawaii Revised Statutes*, §187A-6, and all other applicable laws and regulations. The Research Permit, described below, will allow activity to occur in the NWHI State marine Refuge (0-3 miles) waters surrounding the following areas:

- Mokumanamana Island,
- Nihoa Island,
- French Frigate Shoals,
- Laysan Island,
- Lisianski Island, and
- Pearl and Hermes Atoll.

The activities covered under this permit will occur from April 1, 2007 through September 30, 2007, as outlined below and in the attached permit application.

INTENDED ACTIVITIES

The purpose of the activity is to monitor the six major subpopulations of the Hawaiian monk seal. Annual field assessments are intended to provide immediate information on the status of the species, as well as to obtain data which help provide a long-term view of the species and its trends. The activity will provide information necessary to identify and mitigate factors impeding the species' recovery by evaluating (a) the status and trends of monk seal subpopulations, (b)

natural history traits such as survival, reproduction, growth, behavior, and feeding habits, and (c) the success of various activities designed to facilitate population growth.

Specific objectives vary somewhat among the islands and field teams, but generally include most of the following: Census/Atoll count (minimum 10); ID/Bleaching of seal subpopulation; determination of birth/weaning dates; tagging pups; documenting factors which could adversely affect survival such as associations among seals and adult male aggression/injury; digital photo database; collection of scats & spews; documentation of fishery interaction and debris entanglement (including disentangling seals); removal of potentially entangling marine debris from beaches; assessing condition of existing seal tags and retagging as necessary; and conducting necropsies on dead seals.

Field personnel observe monk seals on regular, scheduled circuits of the island/atoll, collecting a suite of data items including size, sex, condition, identity information (tags, bleach marks, scars), molt/reproductive status, factors affecting survival, photographs, and association with other seals. All weaned pups are measured and tagged, and tags are also replaced in some older seals. Temporary bleach marks are applied to seals to facilitate identification and total enumeration of the population. Seals entangled in marine debris are disentangled when it is safe to do so. Necropsies are conducted on any dead seals, and a suite of tissue samples is collected. Personnel will remove from the beach and store in a secure location (to be picked up at a later date) all marine debris found on the beach which is capable of entangling monk seals.

The Protected Species Division has assessed Hawaiian monk seal subpopulations in the NWHI annually since 1982, and has continued to adhere to quarantine protocols as they have been established and refined by the USFWS. All take of Hawaiian monk seals are in accordance with procedures delineated in permits issued by the NMFS Office of Protected Resources, and have been evaluated as posing no threat to the species. Activity is currently authorized under Scientific Research and Enhancement Permit No. 848-1695-02, issued by the Office of Protected Resources, National Marine Fisheries Service.

Vessel transportation will be provided by the NOAA R/V Oscar Elton Sette. Aircraft transportation will be via aircraft chartered by the USFWS Office of Aircraft Services (presently a Gulfstream G-IV to Midway Atoll, and a Piper Aztec to French Frigate Shoals).

REVIEW PROCESS

The permit application was received by the Division of Aquatic Resources on or before February 1, 2007. It was sent out for review and comment to the following scientific entities: Division of Aquatic Resources staff (5), Northwestern Hawaiian Islands Marine National Monument, NOAA Pacific Islands Regional Office (NOAA-PIRO), and United States Fish and Wildlife Service. Native Hawaiians from the Office of Hawaiian Affairs (OHA), and the Kahoolawe Island Reserve Commission (KIRC) were also consulted.

Comments were received from NOAA-PIRO, and DAR. Both the DAR and NOAA-PIRO submitted favorable reviews. One reviewer noted that these activities are already permitted under NMFS Hawaiian Monk Seal Permit 848-1695-02.

No Comments were received from the USFWS, OHA or KIRC.

RESPONSE:

Although no comments were received from the Native Hawaiian Community, it should be noted that NOAA researchers have conducted numerous meetings and consultations with members of the native Hawaiian community to seek their input and guidance on NWHI monk seal research. PIFSC staff meet with representatives from Kahoolawe Island Reserve Council, Office of Hawaiian Affairs, Hawaiian Civic Club of Kau, Native Hawaiian Cultural Working Group, and with traditional practitioners Bob DeMate, Laakea Sukanuma, and Kepa Maly.

FINAL STAFF RECOMMENDATIONS:

DAR staff is of the opinion that Applicant has properly demonstrated valid justifications for his application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with the following special instructions and conditions, which are in addition to the General Conditions imposed by the Application Guidelines:

1. Direct that Applicant and associated staff shall be briefed on Native Hawaiian cultural traditions and practices at least once a year, and that Applicant shall consider providing additional access for Native Hawaiian cultural studies or practices as appropriate.
2. Direct that the hulls of the support vessel and all tender vessels must be certified and documented free of fouling organisms before each and every cruise to the NWHI. This procedure must be performed prior to each departure from the Main Hawaiian Islands. Inspection records must be immediately submitted to DAR upon request.
3. Swimming and snorkeling are allowed only for research activities and for personal hygiene.
4. Direct that all forms of fishing, no matter for subsistence, sustenance, commercial or recreational purposes, are prohibited in State waters.

RECOMMENDATION:

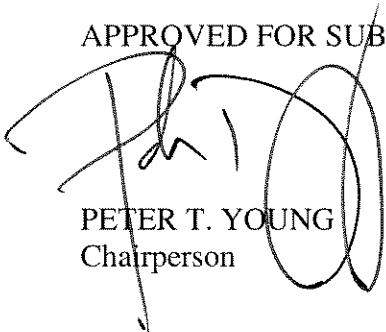
"That the Board authorize and approve, with stated conditions, a Research Permit to Dr. Jason Baker of the National Oceanic and Atmospheric Administration, for activities and access within the State waters of the NWHI for the purpose of monk seal research.

Respectfully submitted,



DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL



PETER T. YOUNG
Chairperson

Northwestern Hawaiian Islands Marine National Monument
Permit Application

NOTE: This Permit Application (and associated Instructions) are for activities to be conducted in the Northwestern Hawaiian Islands Marine National Monument, including Hawaiian Islands National Wildlife Refuge, the Midway Atoll National Wildlife Refuge, Battle of Midway National Memorial, Northwestern Hawaiian Islands State Marine Refuge, Kure Atoll Hawaii State Seabird Sanctuary, and the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, please provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historical and cultural resources of the NWHI Marine National Monument (Monument).

Summary Information

Applicant name:

Permit categories:

- ☒ Research – Please fill out Sections A-D (as applicable) and Appendix A
- ☐ Conservation and Management - Please fill out Sections A-D (as applicable) and Appendix A
- ☐ Education - Please fill out Sections A-D (as applicable) and Appendix B
- ☐ Native Hawaiian Practices - Please fill out Sections A-D (as applicable) and Appendix C
- ☐ Recreation (Midway ONLY) - Please fill out Sections A-D (as applicable) and Appendix D
- ☐ Special Ocean Use - Please fill out Sections A-D (as applicable) and Appendix E

Briefly describe permit activity:

- ☒ This application is for a RENEWAL of an existing permitted project.
- ☐ This application is for a NEW project.

When will the activity take place?

From: ~April 1, 2007 To: ~September 15, 2007

NOTE: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED

Please Send Permit Applications to:

NWHI Marine National Monument Permit Coordinator

6600 Kalaniana'ole Hwy. # 300

Honolulu, HI 96825

Hoku.johnson@noaa.gov

PHONE: (808) 397-2660 FAX: (808) 397-2662

NOTE: SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, PLEASE SEE PG 7.

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Baker, Jason

Title: Zoologist

2. Mailing address (street/P.O. box, city, state, country, zip):

2570 Dole St. Honolulu, HI 96822

Phone: 808-983-5711

Fax: 808-983-2902

Email: Jason.Baker@noaa.gov

For students, major professor's name, telephone and email address:

3. Affiliation (institution/agency/organization directly related to the proposed project):

NOAA, NMFS
Pacific Islands Fisheries Science Center (PIFSC)
Protected Species Division (PSD)

4. Additional persons to be covered by permit:

Bud Antonelis, PIFSC, Bud.Antonelis@noaa.gov, 983-5710
Brenda Becker, PIFSC, Brenda.Becker@noaa.gov, 983-5714
Robert Braun, Private Contractor, rbraun@lava.net, 239-0440
Maire Cahoon, Bernice P. Bishop Museum, Maire.Cahoon@noaa.gov, 216-3333
Marie Chapla, Aquatic Farms Ltd., Marie.Chapla@noaa.gov, 983-5339
Robert Dollar, PIFSC, Robert.Dollar@noaa.gov, 983-3702
John Henderson, PIFSC, John.R.Henderson@noaa.gov, 983-5712
Thea Johanos-Kam, PIFSC, Thea.Johanos-Kam@noaa.gov, 983-5713
Dave Johnston, Research Corporation of University of Hawaii (RCUH),
Dave.Johnston@noaa.gov, 983-5398
Liz Kashinsky, RCUH, Elizabeth.Kashinsky@noaa.gov, 983-3706,
Charles Littnan, PIFSC, Charles.Littnan@noaa.gov, 983-5392
Jessica Lopez, RCUH, Jessica.Lopez@noaa.gov, 983-3707
Darin Padula, RCUH, Darin.Padula@noaa.gov, 983-3709

Tracy Wurth, RCUH, Tracy.Wurth@noaa.gov, 983-2958
Chad Yoshinaga, PIFSC, Chad.Yoshinaga@noaa.gov, 983-3712

Names of additional field staff will be provided when the personnel have been hired.

Section B: Project Information

5a. Project location(s):

- | | | |
|--|--|--------------------------------------|
| <input checked="" type="checkbox"/> Nihoa Island | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input checked="" type="checkbox"/> Necker Island (Mokumanamana) | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input checked="" type="checkbox"/> French Frigate Shoals | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input type="checkbox"/> Gardner Pinnacles | <input type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input type="checkbox"/> Maro Reef | | |
| <input checked="" type="checkbox"/> Laysan Island | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input checked="" type="checkbox"/> Lisianski Island, Neva Shoal | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input checked="" type="checkbox"/> Pearl and Hermes Atoll | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input checked="" type="checkbox"/> Midway Atoll | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input checked="" type="checkbox"/> Kure Atoll | <input checked="" type="checkbox"/> Land-based | <input type="checkbox"/> Ocean-based |
| <input type="checkbox"/> Other | | |

NOTE: Please note there is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description: Location will be the sand beaches of all islands specified, including sand beaches of all islets within the atoll complexes of Kure Atoll, Midway Atoll, Pearl & Hermes Atoll, and French Frigate Shoals.

5b. Check all applicable regulated activities proposed to be conducted in the Monument:

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving monument resource
- ☐ Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- ☒ Anchoring a vessel
- ☐ Deserting a vessel aground, at anchor, or adrift
- ☒ Discharging or depositing any material or matter into the monument
- ☐ Touching coral, living or dead
- ☐ Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the monument
- ☐ Attracting any living monument resource
- ☐ Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- ☐ Subsistence fishing (State waters only)
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

6. Purpose/Need/Scope *State purpose of proposed activities:*

The purpose of the activity is to monitor the six major subpopulations of the Hawaiian monk seal. Annual field assessments are intended to provide immediate information on the status of the species, as well as to obtain data which help provide a long-term view of the species and its trends. The activity will provide information necessary to identify and mitigate factors impeding the species' recovery by evaluating (a) the status and trends of monk seal subpopulations, (b) natural history traits such as survival, reproduction, growth, behavior, and feeding habits, and (c) the success of various activities designed to facilitate population growth.

Specific objectives vary somewhat among the islands and field teams, but generally include most of the following: Census/Atoll count (minimum 10); ID/Bleaching of seal subpopulation; determination of birth/weaning dates; tagging pups; documenting factors which could adversely affect survival; associations among seals; adult male aggression/injury; digital photo database; collection of scats & spews; documentation of fishery interaction and debris entanglement (including disentangling seals); removal of potentially entangling marine debris from beaches; assessing condition of existing seal tags and retagging as necessary; and conducting necropsies on dead seals.

7. As explained further in the instructions, please provide any information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historical and cultural resources of the Monument:

The Hawaiian Islands NWR is home to approximately 82% of the entire population of endangered Hawaiian monk seals (Carretta et al. 2002). Research towards recovery of the species is mandated by the Marine Mammal Protection Act and the Endangered Species Act. Specific to the findings in the Presidential Proclamation, the following apply.

a. The activity can be conducted with adequate safeguards for the resources and ecological integrity of the Monument; The PSD has assessed Hawaiian monk seal subpopulations in the NWHI annually since 1982, and has continued to adhere to quarantine protocols as they have been established and refined by the USFWS. All take of Hawaiian monk seals is in accordance with procedures delineated in permits issued by the NMFS Office of Protected Resources, and have been evaluated as posing no threat to the species.

b. The activity will be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects; The single goal of the Hawaiian monk seal research program at PIFSC is recovery of the Hawaiian monk seal, and all objectives of the field assessment work towards that goal, thereby striving to enhance resources within the Monument.

c. There is no practicable alternative to conducting the activity within the Monument; Most of the Hawaiian monk seal population occurs within the monument, so assessment of the species requires activity within the monument.

d. The end value of the activity outweighs its adverse impacts on Monument resources, qualities, and ecological integrity; Annual field assessments are intended to provide immediate information on the

status of the species, as well as information that helps provide a long-term view of the species and its trends. These assessments are the core to all efforts to recover the species, and continuation of annual assessments is a high priority recommendation within the Hawaiian monk seal recovery plan. Moreover, the presence of field camps has minimal impact on Monument resources, qualities, and ecological integrity.

e. The duration of the activity is no longer than necessary to achieve its stated purpose; The duration of monk seal population assessment in the field is balanced among several driving factors, including the optimum number of island/atoll counts required to obtain an unbiased beach count ($n = 10$), the number of hours of observation time (100) to enumerate the population at certain NWHI field sites, and the length of time to identify parturient females (2-3 months) to obtain reproductive rates. Moreover, due to cost restraints, field assessment is highly dependent on available cruise dates of the NOAA R/V *Oscar Elton Sette*, which provides transportation. In 2007 the field camp durations were adjusted from past years (longer at Pearl & Hermes Atoll and Kure Atoll, shorter at Laysan and Lisianski Islands). Given all these factors, the duration of the field camps are the best at this time to adequately assess the six major subpopulations.

f. The applicant is qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct; The PSD at PIFSC has conducted field assessments of monk seals in the NWHI annually since 1982, and is recognized as being central to Hawaiian monk seal research.

g. The applicant has adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct; The PSD has annually received funding adequate to perform the activity, and anticipates that 2007 funding levels will continue to suffice. If additional funds are required to mitigate any unexpected impact, resources would be available from PIFSC or NMFS Office of Protected Resources.

h. The methods and procedures proposed by the applicant are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument resources, qualities, and ecological integrity; The methods have been developed and refined by PIFSC for 25 years, and are appropriate relative to their impact on the Monument.

i. The applicant's vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031; The NOAA vessel R/V *Oscar Elton Sette* has been so equipped.

j. There are no other factors that would make the issuance of a permit for the activity inappropriate. There are no such factors.

Research on and monitoring of Hawaiian monk seals will also provide information to help fulfill goal 6.b. of the U.S. Fish & Wildlife Service, National Wildlife Refuge System: "Conserve, restore where appropriate, and enhance all species of fish, wildlife, and plants that are endangered or threatened with becoming endangered."

8. Procedures: Procedures to be followed during monk seal population monitoring will be detailed in the "2007 Field Manual for Research on the Hawaiian Monk Seal", which will be completed in early April, and a copy of which will be provided to the Monument. Travel plans are detailed in Section D. below. Nonetheless, a brief overview of procedures will be presented here.

Field personnel observe monk seals on regular, scheduled circuits of the island/atoll, collecting a suite of data items including size, sex, condition, identity information (tags, bleach marks, scars), molt/reproductive status, factors affecting survival, photographs, and association with other seals. All weaned pups are measured and tagged, and tags are also replaced in some older seals. Temporary bleach marks are applied to seals to facilitate identification and total enumeration of the population. Seals entangled in marine debris are disentangled when it is safe (for personnel). Necropsies are conducted on any dead seals, and a suite of tissue samples is collected. Personnel will remove from the beach and store in a secure location (to be picked up at a later date) all marine debris found on the beach which is capable of entangling monk seals.

During the pickup cruise of the R/V *Oscar Elton Sette* in September, data will be downloaded from the High frequency Acoustic Recording Package (HARP) which will have been deployed in March from the *Sette* (under a separate monument permit). Batteries will also be changed. Specific location has not yet been determined, but will be in 100-400 m of water in the region surrounding the summit of Ladd Seamount located at approximately W-176.67 & N - 28.49. Specific procedures are that the instrument will be remotely released from its bottom anchors and will float to the surface to be retrieved by personnel in a small boat. The instrument will then be brought back to the laboratory onboard the *Sette* to change out batteries and data storage disks, before being re-deployed in the same location.

During both setup and pickup cruises of the *Sette*, while transiting between islands, dedicated effort will be made to observe cetaceans occurring within sighting distance of the ship. Observers will be stationed atop the bridge searching using high-powered (25x) 'big eye' binoculars. Whenever cetaceans are sighted, distance and bearing will be noted, and the ship may divert from the trackline to obtain photographs.

Section C: Logistics

9. Other permits (list and attach documentation of all other related Federal or State permits):

Activity is currently authorized under Scientific Research and Enhancement Permit No. 848-1695-02, issued by the Office of Protected Resources, National Marine Fisheries Service. A copy is attached.

9a. For each of the permits listed, please identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Please explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation.

The above permit has been modified twice since its original issuance (No. 848-1695-00). The two modifications were to

10. Funding sources (Please attach copies of your budget, specific to proposed activities under this permit and include funding sources. Please see instructions for more information):

All funding will be provided by NOAA.

The budget for 2007 has not been finalized, pending resolution of federal allocations. Below is the budget for the 2006 NWHI population assessment (not including salaries), and we anticipate 2007 budget to be similar.

Item	Cost
Assorted Travel	\$6,500.00
Shipping Charges	\$1,500.00
AOL/MSN	\$250.00
Assorted Rentals/Comms (get detail from CC sheet)	\$15,750.00
Truck Rental	\$1,500.00
World Communications	\$5,000.00
Misc. printing	\$300.00
Boat repair & service	\$4,500.00
Container Rental Contract	\$1,350.00
Flights to FFS	\$11,600.00
Fridge Servicing	\$600.00
FWS payback item	\$12,000.00
Hazmat Disposal	\$1,000.00
Health Force Partners (Med consult)	\$4,000.00
Laundry	\$1,000.00
Midway Assessment	\$8,500.00
Midway Assessment	\$16,500.00
Misc Cleaning & Repairs	\$800.00
Sealing inner cage, aircon, shelving	\$1,000.00
Shuttle Service	\$600.00
Temple Tag Engraving	\$2,000.00
Tent repair	\$2,000.00
Wilderness First Aid Training	\$9,500.00
Binoculars	\$500.00
Bleaching supplies	\$1,500.00
Boating Supplies	\$3,000.00
Bucket Lids	\$1,000.00
Buckets	\$2,000.00
Clothes	\$3,000.00
First Aid/ Medical Supplies	\$5,000.00
Food	\$15,000.00
Fuels (Unleaded, Propane, Blazo)	\$8,000.00
FWS Food (payback)	\$8,550.00
Generator	\$500.00
Hazmat locker for ship	\$1,500.00
Iridium Phones	\$5,000.00
Misc Packing Supplies	\$500.00
Misc Supplies (Living, Kitchen, Office, Packing, Safety/Radio)	\$17,500.00
Quarantine supplies	\$1,000.00
Radios	\$1,000.00
Specimen, Necropsy, HAZMAT	\$1,500.00
Temple Tags	\$300.00
Tent Stakes	\$200.00
Tents & Flys	\$5,000.00
Boat/Engines	\$5,000.00
Cameras	\$1,500.00
Two-Headed Computers	\$5,000.00
Total	\$200,800.00

11. Time frame:

Activity start: April 15, 2007

Activity completion: September 30, 2007

Dates actively inside the Monument:

Nihoa Island and Necker Island

- i. Nihoa and Necker will be visited if time allows via R/V *Oscar Elton Sette*
~September 8-10, 2007
- ii. Leader: Chad Yoshinaga
- iii. Staff: TBN, selected personnel from seal staff at each island.

French Frigate Shoals

- i. Dates: Seal Monitoring ~ April 8 (air charter), through ~ September 15 (air charter);
- ii. Leader TBN
- iii. 2 Staff TBN

Laysan Island

- i. Dates: Setup ~May 19 R/V *Oscar Elton Sette* - Breakdown~ September 7 R/V
Oscar Elton Sette
- ii. Camp Leader: TBN
- iii. Staff: 2 TBN

Lisianski Island

- i. Dates: Setup ~May 20 R/V *Oscar Elton Sette* - Breakdown~ September 6 R/V
Oscar Elton Sette
- ii. Camp Leader: TBN
- iii. Staff: 2 TBN

Pearl and Hermes Reef

- i. Dates: Setup ~May 21 R/V *Oscar Elton Sette* - Breakdown~ September 6 R/V
Oscar Elton Sette
- ii. Camp Leader: TBN
- iii. Staff: 3 TBN

Midway Atoll

- i. Dates: Setup ~April 1 (air travel) - Breakdown~ September 15 (air travel)
- ii. Camp Leader: TBN
- iii. Staff: 1 TBN

Kure Atoll

- i. Dates: Setup ~May 23 R/V *Oscar Elton Sette* - Breakdown~ September 4 R/V
Oscar Elton Sette
- ii. Camp Leader: TBN
- iii. Staff: 1 TBN

Please describe any limiting factors in declaring specific dates of the proposed activity at the time of application:

Precise dates of landing and departure may vary within a day or two from the projected window as each cruise plan is developed for the *Oscar Elton Sette*. However, the cruise schedule has been set, so the dates will not vary greatly.

Personnel schedule in the Monument:

See above. Staffing at field camps has not been finalized, as applications are still being reviewed and no selections have been made. Names should be finalized by March 30, 2007 and will be provided to the Monument.

12. Please indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument:

As a U.S. Government agency, the project is self-insured. All personnel (contractors, state employees, and federal employees) are covered under workers' compensation.

13. Please check the appropriate box to indicate how personnel will enter the Monument:

- ☒ Vessel
☒ Aircraft

Provide Vessel and Aircraft information:

Vessel transportation will be provided by the NOAA R/V *Oscar Elton Sette*. Aircraft transportation will be via aircraft chartered by the USFWS Office of Aircraft Services (presently a Gulfstream G-IV to Midway Atoll, and a Piper Aztec to French Frigate Shoals).

14. What certifications/inspections do you have scheduled for your vessel? Please fill in scheduled date (attach documentation):

- ☐ Rodent free, Date:
☐ Tender vessel, Date:
☐ Ballast water, Date:
☐ Gear/equipment, Date:
☐ Hull inspection, Date:

15. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):

NOAA Vessel

16. Tender information:

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? Please list the number of tenders/skiffs aboard and specific types of motors:

Workboats listed above detailed to the O.E. Sette will be used to transport gear and materials between ship and shore. Workboats at each NWHI site to support the scientific research are as follows: Kure Atoll—20 ft whaler with 4 stroke Honda engine; Pearl and Hermes Atoll—two 20 ft whalers, each with two 4 stroke Honda engines; French Frigate Shoals—two 20 ft whalers, each with two 4 stroke Honda engines.

Four of the tenders (1 Kure, 2 Pearl & Hermes, and 1 French Frigate Shoals) are presently trailered in Honolulu, and have not been in the water since September, 2006. A fifth whaler destined to be used at French Frigate Shoals is presently in use at Midway Atoll. This tender will be transported to French Frigate Shoals in May, 2007, and will not have left Monument waters between Midway and French Frigate Shoals.

Section D: Additional Information for Land Based Operations

17. Proposed movement of personnel, gear, materials, and, if applicable, samples:

Virtually all personnel, supplies and equipment will be transported between Honolulu and the field sites via the R/V *Oscar Elton Sette*, and shuttled between ship and shore via small boats. Some air transport will occur in support of activities at Midway and FFS. All supplies and equipment will be packed in buckets, fumigated, and/or frozen in accordance with USFWS quarantine procedures, and all soft items/clothing will either be new or will not have been used on any other location other than the specific island within the Monument.

18. Room and board requirements on island:

Field personnel will be transported to each of the six islands/atolls inhabited by Hawaiian monk seal subpopulations (Kure, Midway, Pearl & Hermes, Lisianski, Laysan, and FFS), and will reside in temporary field camps (Pearl & Hermes, Lisianski, Laysan), or in structures already in place (Kure, Midway, FFS). Field personnel will also visit Nihoa and Necker Islands as time allows during transit cruises, but will not camp or spend the night on these islands. Projected field schedule and personnel complement are listed below in item 11.

Field camps will be established at the following locations: Pearl & Hermes Atoll—Southeast Island, on the north shore just west of the Southeast Island inlet. Dome tents may also be erected on Seal-Kittery and North Islands (P&H Atoll) for temporary stays of up to 2 consecutive nights by field personnel to facilitate marking and tagging of animals at sites distant from Southeast Island. Lisianski Island—Top of the berm just to the north of the USFWS Refuge sign; Laysan Island—edge of the vegetation just north of the USFWS Refuge sign.

Field personnel at Kure will reside in the State of Hawaii building, or will camp immediately adjacent to the building, depending on the size of any State of Hawaii field complement. Field personnel at Midway will stay in a house and will make appropriate arrangements with the Refuge Manager, Midway Atoll NWR. Field personnel at FFS will reside in the barracks.

19. Work space needs:

Personnel at French Frigate Shoals will require a one-room office and sufficient power for two notebook computers. They will also require storage space similar in scope to that used in 2006, and space to accommodate two trailered whalers.

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct.

Signature

Date

**PLEASE SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT
OFFICE BELOW:**

NWHI Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
FAX: (808) 397-2662

DID YOU INCLUDE THESE?

- ☐ Applicant CV/Resume/Biography
- ☐ Electronic and Hard Copy of Application with Signature
- ☐ Map(s) or GPS point(s) of Project Location(s), if applicable
- ☐ Funding Proposal(s)
- ☐ Funding and Award Documentation, if already received
- ☐ Documentation of Insurance, if already received
- ☐ Documentation of Inspections
- ☐ Documentation of all required Federal and State Permits or applications for permits
- ☐ Statement of information you wish to be kept confidential

Appendix A: Research OR Conservation and Management Application

NOTE: If land or marine archeological activities are involved, please contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, please contact the Monument office on the first page of this application.

1a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

Common name: Hawaiian monk seal

Scientific name: *Monachus schauinslandi*

& size of specimens: Up to 200 tissue plugs from flipper tagging; up to 25 sets of samples from necropsies (sections from all organ systems, parasites, stomach contents, skeletal materials); up to 20 fresh placentae; up to 600 scats; up to 100 spews.

Collection location: All NWHI

☐ Whole Organism ☒ Partial Organism

Common name: seabird tick

Scientific name: *Ornithodoros capensis*

& size of specimens: up to 600

Collection location: all NWHI

☒ Whole Organism ☐ Partial Organism

1b. What will be done with the specimens after the project has ended?

Tissue samples and placentae will histologically examined, and may be sent to secondary laboratories for further analysis depending upon results. Tissue plugs will be split, with a subsample provided to cooperators for DNA analysis, and the remainder archived. Scats and spews will be sorted, and hard parts will be identified. Parasites will be archived and/or sent to parasitologists for identification. Seabird ticks will be archived, to be examined as possible disease vectors if a large scale die-off were to occur. Skeletal materials will be archived.

1c. Will the organisms be kept alive after collection? ☐ Yes ☒ No

- Specific site/location:
- Is it an open or closed system? ☐ Open ☐ Closed
- Is there an outfall? ☐ Yes ☐ No
- Will these organisms be housed with other organisms? If so, what are the other organisms?
- Will organisms be released?

2. If applicable, how will the collected samples or specimens be transported out of the Monument?

Samples will be transported via the R/V *Oscar Elton Sette*.

3. Describe collaborative activities to share samples, reduce duplicative sampling, or duplicative research:

4a. Gear and materials:

The specific items taken to each location vary somewhat, depending upon whether housing is available. Nonetheless, generally gear and materials to be transported into the Monument comprise all supplies, equipment, food, water, tents, office supplies, first aid and medical materials, and equipment necessary to support 2-3 people for 3 months. Gear will also include communications equipment, solar charging apparatus, cameras, binoculars, sampling equipment, and notebook computers. Detailed spreadsheets listing all items for each site are available upon request.

4b. Please list all Hazardous Materials you propose to take to and use within the Monument:

FLAMMABLES

Misc.

Corrosion Block

Epoxy Cement

Marine Sealant / Silicon Sealer

Ospho Rust Remover

Silicone Lubricant

WD-40/LPS

Generator

Gas, 5 gal can

Carburetor Cleaner

Lead Substitute

Motor Oil, Quart (SAE 10W-40)

Propane

Propane tank, 40 lb

Propane tank, 1 lb

Insecticide

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Ragen TJ 1993. Status of the Hawaiian monk seal in 1992. Southwest Fish. Sci. Cent. Admin. Rep. H-93-05, 79p.

Reif JS, Kliks MM, Aguire AA, Borjesson DL, Kashinsky L, Braun RC, Antonelis GA2006. Gastrointestinal helminths in the Hawaiian monk seal (*Monachus schauinslandi*): associations with body size, hematology, and serum chemistry. *Aquat. Mamm.* 32(2): 157-167

DID YOU INCLUDE THESE?

☐ Material Safety Data Sheets for Hazardous Materials

MSDS sheets are available upon request



Department of Land and Natural Resources
Northwestern Hawaiian Islands Permit Application Review

Permit Type: Management ☐ Recreation ☐ Research ☒
Education ☐ Cultural ☐ Special Ocean Use ☐

Working Title: Authorization/Approval to issue a Northwestern Hawaiian Islands (NWHI) Research Permit to Dr. Jason Baker, NOAA-PIFSC to access waters surrounding Mokumanamana Island, Nihoa Island, French Frigate Shoals, Laysan Island, Lisianski Island, and Pearl and Hermes Atoll to monitor the six subpopulations of Hawaiian Monk Seal.

Project Applicant: NOAA, NMFS, PIFSC **Principle Investigator:** Dr. Jason Baker

Project Location(s) (Both State Waters and Monument): Mokumanamana Island, Nihoa Island, French Frigate Shoals, Laysan Island, Lisianski Island, and Pearl and Hermes Atoll.

Project Dates and Duration: April 1, 2007 through September 30, 2007

Project Précis & Background *(Summary of project and why this is proposed):*

The purpose of the activity is to monitor the six major subpopulations of the Hawaiian monk seal. Annual field assessments are intended to provide immediate information on the status of the species, as well as to obtain data which help provide a long-term view of the species and its trends. The activity will provide information necessary to identify and mitigate factors impeding the species' recovery by evaluating (a) the status and trends of monk seal subpopulations, (b) natural history traits such as survival, reproduction, growth, behavior, and feeding habits, and (c) the success of various activities designed to facilitate population growth.

Are there other relevant permits that have/will be issued with regard to this project? Yes ☒
Scientific Research and Enhancement Permit No. 848-1695-02, issued by the Office of Protected Resources, National Marine Fisheries Service.

What is the relevance to management and/or the improved understanding of NWHI & MHI?

This research is driven by a federal mandate to promote stock recovery for listed threatened and endangered species, and to protect their habitat.

Could work be conducted outside the NWHI?: Yes ☐ No ☒

Explain: The majority of the Hawaiian monk seal population is located within the Papahānaumokuākea Marine National Monument.

Has Applicant been granted a permit from the State in the past? Yes ☒ No ☐

If so, please summarize past permits:

Although the Principal Investigator is now Dr. Baker, this research project was permitted in 2006 under DLNR.NWHI06RA001 and DLNR.NWHI06R016 issued to Dr. Antonelis of the Protected Species Division. All terms in full compliance.

Have there been any a) violations: Yes ☐ No ☒ b) late/ incomplete reports: Yes ☐ No ☒

Any other relevant concerns from previous permits? _____

Recommendations:

DAR Staff: Approve this permit application ☒ Reject this permit application ☐

NH CWG: Approve this permit application ☐ Reject this permit application ☐

Additional Comments:

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**NORTHWESTERN HAWAIIAN ISLANDS STATE MARINE
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G. SPECIAL PERMIT CONDITIONS:

This Permit is subject to the following special conditions:

1. Permittee shall, before any cruise to the NWHI, apply for and obtain appropriate permit(s) for their activities in the NWHI Marine National Monument from the National Oceanic and Atmospheric Administration and the U.S. Fish and Wildlife Service.
2. During the permitted period and before participating in a cruise allowed under this Permit, Permittee and all authorized personnel who participate in any activities in the NWHI under this permit shall attend a cultural briefing on the Northwestern Hawaiian Islands, their cultural significance and Native Hawaiian practices. Permittee shall consider providing additional access for Native Hawaiian cultural studies or practices as appropriate.
3. Permittee shall submit a cruise plan to the State through the Division of Aquatic Resources (DAR) prior to each cruise to the NWHI allowed under this Permit, and shall timely update his personnel list with DAR if there is any change or addition thereof.
4. Each of the authorized personnel who participate in any activities in the NWHI under this permit shall, prior to any of such activities, read and attest with signature to the full agreement of all the term and conditions of this Permit. The signature/declaration sheets shall be submitted to DAR along with the updated personnel list, if any, prior to departures to the NWHI.
5. Permittee shall, within thirty (30) days of each concluded cruise to the NWHI, submit to the State through DAR a cruise report for the trip as required in the following General Permit Conditions.
6. No taking, collecting, sampling, catching, killing or interacting with any wildlife in the State Waters are allowed under this permit. All forms of fishing, no matter for subsistence, sustenance, commercial or recreational purposes, are prohibited in all NWHI State waters.
7. Recreational swimming and snorkeling activities are allowed only on the Tern and Laysan Islands and only for authorized personnel whose stay on the respective islands will last for at least two days.
8. Pursuant to Section 188-23, HRS, any use of electrical shocking devices, explosives, chemicals or other contaminating or hazardous substances is expressly prohibited, except to the extent that certain chemicals are allowed for use onboard of support

NORTHWESTERN HAWAIIAN ISLANDS STATE MARINE REFUGE SPECIAL ACTIVITY PERMIT (USFWS) GENERAL AND SPECIAL CONDITIONS 2007

vessels with limitations as to the types and amounts as stated in Permittee's application. Transportation of such materials in State waters is also allowed for transit purpose only.

9. Entries and activities of support vessel(s) in the NWHI State Waters shall require separate permit(s) from the State through DAR or from the NWHI Marine National Monument Joint Management Board. These vessel(s) shall be identified by Permittee to DAR or the Joint Management Board in a separately filed permit application, with all relevant information, at least thirty (30) days prior to departure to the NWHI.

H. GENERAL PERMIT CONDITIONS:

This Permit is further subject to the following general conditions:

NORTHWESTERN HAWAIIAN ISLANDS STATE MARINE REFUGE ACTIVITY PERMIT GENERAL CONDITIONS

1. This permit does not make the Board of Land and Natural Resources or the State of Hawai'i liable in any way for any claim of personal injury or property damage to the permittee or assistants which may occur during any activity authorized by this permit; moreover, the permittee and all assistants agree to hold the State harmless against any and all claims of personal injury, death or property damage resulting from activities of the permittee or any assistant, actions or omissions under this permit.
2. This permit conveys a privilege to engage in activities within State waters under the jurisdiction of the Division of Aquatic Resources (DAR). The permittee is responsible for complying with all applicable County, State, and Federal requirements.
3. The permittee and other personnel are individually responsible and accountable for their actions while conducting activities authorized under this permit. Additionally, the permittee is responsible and accountable for the actions of the permittee's assistants.
4. This permit is not transferable or assignable. Any person whose name does not appear on this permit and is conducting any activity described herein is subject to prosecution for violations of State Laws. The permit holder must abide by all provisions set out in the permit as well as other applicable regulations.
5. Permitted activities must be conducted with adequate safeguards for the environment. To the extent possible, the environment shall be restored to its existing condition prior to the cessation of the permitted activity.

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6. Permits must be carried aboard vessels and made available on request for inspection by the DLNR or USFWS Refuge or other enforcement personnel. For in-water activities, it is recommended that a copy of the permit be laminated and available for display at all times, in addition to copies held by personnel and aboard the major form of transport into the NWHI State Marine Refuge and the NWHI Marine National Monument.
7. All private vessels used to access the NWHI Marine Refuge must carry a minimum amount of Wreck Removal and Pollution insurance, specifically targeted and sufficient to provide for the vessel's full extraction and removal from the NWHI should it run aground or experience difficulties. The extraction method used must be approved by the Board and by other appropriate State or Federal resource trustees.
8. Any vessel causing damage to marine resources within the refuge may be subject to citation from DLNR and fines from the Board, in addition to costs necessary to mitigate the disturbance caused.
9. Recent concerns over the proliferation of alien algae in the main Hawaiian Islands have resulted in the need for a strong effort on the part of any visitor that conducts activities in the pristine waters of the NWHI to insure that they do not serve as vectors for the accidental introduction of these species. The minimum successful fragmentation size for at least two of the concerned algal species is less than 1 cm. The Board requires that all activities in State waters in the NWHI take all steps necessary to eliminate the possibility of accidentally transferring these (and other) harmful species into new ecosystems where they might gain a foothold. As such, DLNR has developed a set of requirements for all divers and snorkelers to follow prior to departure for the NWHI:
 - a. Unzip and open all pockets on buoyancy compensators, dive bags and wet suits;
 - b. Submerge and soak all dive gear (including dive bags) and transecting gear for a minimum of 24 hours in 100% fresh water;
 - c. Thoroughly dry and then visually inspect all gear prior to departure for NWHI; and
 - d. Any algal pieces must be removed and discarded prior to departure.
10. The transport vessel, as well as all tenders and dive boats (inflatables, whalers), engines, anchor lines, etc. will be visually inspected for any algal remnants or other alien species which must be removed prior to departure for the NWHI. If necessary, the vessels must be washed and fumigated prior to departure from the main Hawaiian Islands. This shall be properly documented, records of which must be immediately submitted to the State upon request.

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11. The same procedure above is required of all expeditions traveling to multiple islands within the NWHI. If drying and inspection occur after departure then the algal pieces must be retained in sealed containers until they can be disposed of back on O'ahu. Extreme care must be taken to kill these specimens (freshwater soak for 24 hours followed by drying and placement in sealed containers) during transport.
12. All participants (including crew) in a permitted activity or aboard a permitted mode of transport will abide by the non-harassment of protected and unique marine wildlife policy. This includes staying away from Hawaiian monk seals and sea turtles, and minimize disturbance to assemblages of large apex predators such as jacks, sharks or grouper, and avoiding damage to any live coral or live rock.
13. In accordance with Federal and State Laws, there will be no intentional release of sewage, food scraps, solids, or chemicals from the transport vessel in State waters during the permitted expedition. All sewage and other discharge items will be held in a proper storage tank until it can be off-loaded to proper handling facilities or until other written approved protocols are in place.
14. Tenders will be outfitted with EPA omissions approved outboard engines that meet the latest environmental standards.
15. Refueling of tenders and all small vessels will be done at the mother ship and outside the confines of the lagoons or near-shore waters.
16. Tender and dive vessels will operate at slow speed and with a bow lookout in shallow water NWHI coral reef areas in order to minimize prop or bow damage to three dimensional coral reef habitat or endangered monk seals or sea turtles.
17. Anchoring:
 - a. Permitted Transport Vessel: It is illegal to anchor on living coral reef areas in the NWHI. Transport vessels will endeavor to anchor as far offshore as possible and will try to pre-determine anchorages prior to departure.
 - b. Tenders and Dive Vessels: It is illegal to anchor on living coral reef areas in the NWHI while conducting inshore operations. In those areas where anchoring needs to occur adjacent to living coral resources, placement and retrieval of the anchor will be done by hand whenever this procedure can be done in a safe and prudent manner.
18. The permittee, assistants and ship's crew agree to provide access to data, logs, photos and other documentation obtained under, or required by, this permit upon

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request of the Division, and to allow Department staff to inspect on-board the vessel, or afterwards on the permittee's premises, any and all organisms and other samples collected under this permit. Furthermore, the permittee and assistants agree to provide to the Division a copy of each published report prepared with data obtained under this permit.

19. The permittee may request changes to the permit. Any such request to make changes to the permit must be made in writing and received by DAR at least two weeks prior to the change, except in cases of emergencies. No change may be implemented without written approval from DAR. In this manner, the permittee may request to:
 - a. Add assistants to the permit;
 - b. Add another permittee or be replaced by another permittee; and
 - c. Make changes to the activities allowed under this permit.
20. This permit expires on the date indicated on Page 1.
21. This permit is not to be used for nor does it authorize the sale of collected organisms. The research activity must be non-commercial and will not involve the sale of any organism, byproduct, or material collected. Furthermore, any resources or samples collected are a public trust, and are not to be used for sale, patent, bioassay, or bio-prospecting, or for obtaining patents or intellectual property rights.
22. The permittee may not convey in any fashion (including, but not limited to, selling, trading, or giving) any corals, live rocks or any organisms collected under this permit to any person or party which does not already have a permit from the Hawaii Department of Land and Natural Resources authorizing possession of the same and without direct, written approval from DAR.
23. Permit holders agree to submit a project report and cruise log to DAR within 30 days after returning to Honolulu. The project report will be a brief (1-2) page statement summarizing the results of permitted activities. A cruise log shall list the days spent in the Marine Refuge, activities carried out, approximate positions, and general observations. Permit holders must also provide DAR with project summaries, GPS locations, visuals, technical reports, and/or catch reports (if applicable) for activities undertaken while in the NWHI Marine Refuge as specified in the conditions of their individual permit.
24. Permit holders are encouraged to immediately report to DAR observation of any impacts to the marine resources, whether directly caused by their activities or not. This includes observations of activities conducted by other parties along with both natural and anthropogenic events. Permittees provide a valuable role as 'eyes and

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ears' on the water. All recorded observations by permittees will provide additional information and assist with management of the refuge. Such reporting shall include full documentation with notes, logs, photos, GPS, and other information as may be required.

25. A violation of any terms or condition of this permit or any violation of State law not covered by this permit may result in revocation of the permit and other penalties as provided by law. In addition, DAR may consider any such violation as grounds for denying any future permit applications.
26. The issuance of a permit shall not constitute a vested right to receive additional or future permits. There is no right to a renewal or re-issuance of a permit.
27. The Board may immediately amend, suspend, or revoke a permit granted pursuant to these guidelines, in whole or in part, temporarily or indefinitely, if the permit holder(s) has acted in violation of the terms of the permit, or for any good cause shown. Formal notice of such action shall be subsequently communicated in writing to the permit holder and shall set forth the reason for the action taken. Any verbal notification from a Board representative of a violation will also result in immediate cessation of all activities within the Refuge.
28. Disease protocols:
 - a. All sampling and dive gear will be disinfected in an enclosed container for 10 minutes or more between sites with a fresh 10% bleach solution in order to kill any microorganisms and eliminate the possibility of disease transmission by researchers.
 - b. Wet lab surfaces will be wiped down after each activity with a fresh 10% bleach solution in order to kill any microorganisms and eliminate the possibility of disease transmission by researchers.¹
 - c. Tender vessels that have been inside French Frigate Shoals lagoonal waters (where diseased organisms are known to occur) will be disinfected by wiping down their internal and external surfaces with a fresh 10% bleach solution in order to kill any microorganisms and eliminate the possibility of disease transmission by researchers. This will occur when the vessel is outside State waters and prior to the support vessel leaving the immediate vicinity of French Frigate Shoals.

¹ Any deviation from this condition will require advance, written notice to DAR, and be subject to DAR's review and approval.

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29. No live organisms will be transported outside of the NWHI State Refuge waters, unless otherwise authorized by this permit. Samples will be killed by freezing, immersion in ethanol, or other acceptable means aboard the vessel and prior to leaving State waters.
30. A daily log shall be submitted to and maintained by the appointed State or other co-trustee representative whereby any organisms collected will be documented on a daily basis relative to what was collected, the amount, the size of the specimens, the location (including specific GPS points), and the status of the specimen(s). The log entry will be signed by the person who collected the organisms and countersigned by the State representative after validation of the collection; this log will constitute a legal document for enforcement purposes.